PATENTS
Attorney Docket No.: ELM-1 Cont.10

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Glenn J. Leedy

Application No. : 10/700,429 Confirmation No.: 5639

Filed : November 3, 2003

For : MEMBRANE IC FABRICATION (AS AMENDED)

Group Art Unit : 2814

Examiner : Shrinivas Rao

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97, applicant wishes to call the attention of the Examiner to the following documents:

U.S. Patent Documents

Goodman	01-20-1976	US 3,932,932
Eisenberger	06-07-1977	US 4,028,547
Greschner et al.	07-12-1983	US 4,393,127
Kurosawa et al.	07-09-1985	US 4,528,072
Sobczak	08-05-1986	US 4,604,162
Yokomatsu et al.	03-07-1989	US 4,810,889
Butt et al.	07-18-1989	US 4,849,857
Williamson	05-22-1990	US 4,928,058
Sliwa	02-05-1991	US 4,990,462
Celler et al.	09-24-1991	US 5,051,326
Kessler et al.	05-05-1992	US 5,110,712
Sliwa et al.	06-02-1992	US 5,119,164

U.S. Patent Documents

Murooka et al.	11-24-1992	US 5,166,962
Mok et al.	12-08-1992	US 5,169,805
Hori et al.	02-23-1993	US 5,188,706
Moslehi	02-08-1994	US 5,284,804
Capps et al.	07-18-1995	US 5,432,999
Sachdev et al.	11-28-1995	US 5,470,693
Clifton et al.	01-02-1996	US 5,480,842
Bair et al.	11-19-1996	US 5,577,050
Flesher et al.	03-31-1998	US 5,733,814
Di Zenzo et al.	04-28-1998	US 5,745,673
Bertin et al.	10-06-1998	US 5,818,748
Clifton et al.	04-09-2002	US Re 37,637

Foreign Patent Documents

EP 0 201 380 B1	12-17-1986	Fairchild Semiconductor Corporation
EP 0 224 418 B1	06-03-1987	Fujitsu Limited
EP 0 419 898 B1	04-03-1991	Siemens Aktiengesellschaft
EP 0 455 455 B1	11-06-1991	AT&T Corp.
EP 0 487 302 B1	05-27-1992	Shin-ETSU Handotai Company Limited
EP 0 503 816 B1	09-16-1992	Shin-ETSU Handotai Company Limited
EP 0 518 774 B1	12-16-1992	France Telecom
EP 0 526 551 B1	02-10-1993	The Commonwealth of Australia
EP 0 554 063 B1	08-04-1993	Canon Kabushiki Kaisha
EP 0 555 252 B1	08-18-1993	Fraunhoffer-Gesellschaft Zur Förderung Der Angewandten Forschung E.V..
WO 1989 010255	11-02-1989	3D Systems Inc.
WO 1990 009093	08-23-1990	Polylithics Inc.
WO 1992 017901	10-15-1992	Integrated System Assemblies Corporation

Nonpatent Literature Documents

Jones, R.E., Jr. "An evaluation of methods for passivating silicon integrated circuits"; April 1972; pp. 23-8

Svechnikov, S.V.; Kobylyatskaya, M.F.; Kimarskii, V.I.; Kaufman, A.P.; Kuzovlev, Yu. I.; Cherepov, Ye. I.; Fomin, B.I.; "A switching plate with aluminum membrane crossings of conductors"; 1972

Sun, R.C.; Tisone, T.C.; Cruzan, P.D.; "Internal stresses and resistivity of low-voltage sputtered tungsten films (microelectronic cct. conductor)"; March 1973; pp. 1009-16

Wade, T.E.; "Low temperature double-exposed polyimide/oxide dielectric for VLSI multilevel metal interconnection"; 1982; pp. 516-19

Boyer, P.K.; Collins, G.J.; Moore, C.A.; Ritchie, W.K.; Roche, G. A.; Solanski, R. (A); Tang, C.C.; "Microelectronic thin film deposition by ultraviolet laser photolysis MONOGRAPH TITLE - Laser processing of semiconductor devices"; 1983; pp. 120-126

Boyer, P.K.; Moore, C.A.; Solanki, R.; Ritchie, W.K.; Roche, G.A.; Collins, G.J.; "Laser photolytic deposition of thin films"; 1983; pp. 119-27

Chen, Y.S.; Fatemi, H.; "Stress measurements on multilevel thin film dielectric layers used in Si integrated circuits"; May-June 1986; pp. 645-9

Salazar, M.; Wilkins, C.W., Jr.; Ryan, V.W.; Wang, T.T.; "Low stress films of cyclized polybutadiene dielectrics by vacuum annealing"; Oct. 21-22, 1986; pp. 96-102

Townsend, P.H.; Huggins, R.A.; "Stresses in borophosphosilicate glass films during thermal cycling"; Oct. 21-22, 1986; pp. 134-41

Pai, Pei-Lin; "Multilevel Interconnection Technologies--A Framework And Examples"; 1987; pp. 1871

Pei-lin Pai; Chetty, A.; Roat, R.; Cox, N.; Chiu Ting; "Material characteristics of spin-on glasses for interlayer dielectric applications"; November 1987, pp. 2829-34

Nonpatent Literature Documents

Allen, Mark G.,; Senturia, Stephen D.; "Measurement of polyimide interlayer adhesion using microfabricated structures"; 1988; pp. 352-356

Chang, E.Y.; Cibuzar, G.T.; Pande, K.P.; "Passivation of GaAs FET's with PECVD silicon nitride films of different stress states"; September 1988; pp. 1412-18

Riley, P.E.; Shelley, A.; "Characterization of a spin-applied dielectric for use in multilevel metallization"; May 1988; pp. 1207-10

Tamura, H.; Nishikawa, T.; Wakino, K.; Sudo, T.; "Metalized MIC substrates using high K dielectric resonator materials"; October 1988; pp. 117-126

Kochugova, I.V.; Nikolaeva, L.V.; Vakser, N.M., (M.I. Kalinin Leningrad Polytechnic Institute (USSR); "Electrophysical investigation of thin-layered inorganic coatings"; 1989; pp. 826-828

Reche, J.J. H.; "Control of thin film materials properties used in high density multichip interconnect"; April 24-28, 1989; p. 494

Maw, T.; Hopla, R.E.; "Properties of a photoimageable thin polyimide film"; Nov. 26-29-, 1990; pp. 71-6

Draper, B. L.; Hill, T.A.; "Stress and stress relaxation in integrated circuit metals and dielectrics"; July-Aug. 1991; pp. 1956-62

Guckel, H.; "Surface micromachined pressure transducers"; 1991; pp. 133-146

Garino, T.J.; Harrington, H. M.; "Residual stress in PZT thin films and its effect on ferroelectric properties'; 1992; pp. 341-7

The aforementioned references are listed on the accompanying Form PTO-SB/08 (submitted in duplicate). Pursuant to 37 C.F.R. § 1.98(a)(2), no copies of the aforementioned U.S. Patent Documents are being submitted. Copies of the listed Foreign Patent Documents and Nonpatent Literature Documents are being submitted herewith.

Applicant reserves the right to establish the patentability of the claimed invention over any of the

information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

It is respectfully requested that these references be: (1) fully considered by the Patent and Trademark Office during the examination of this application; and (2) printed on any patent which may issue on this application. Applicant requests that a copy of Form PTO-SB/08, as considered and initialled by the Examiner, be returned with the next communication.

The Clifton and Flesher U.S. Patent Documents (U.S. Patent Nos. 5,480,842, 5,733,814, and Re 37,637) were cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application No. 10/614,067 on September 21, 2005. Butt et al. U.S. Patent No. 4,849,857 was cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application No. 10/971,341 on September 20, 2005. The Bair et al., Di Zenzo et al., and Bertin et al. U.S. Patent Documents (U.S. Patent Nos. 5,577,050, 5,745,673, and 5,818,748) were cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application No. 10/143,200 on October 18, 2005. The Goodman and Kurosawa et al. U.S. Patent Documents (U.S. Patent Nos. 3,932,932 and 4,528,072) were cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application No. 10/742,057 on November 17, 2005. The Eisenberger, Greschner et al., Yokomatsu et al., Celler et al., Murooka et al., and Hori et al. U.S. Patent Documents (U.S. Patent Nos. 4,028,547, 4,393,127, 4,810,889, 5,051,326, 5,166,962, and 5,188,706) were cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application

No. 10/766,557 on December 7, 2005. The Mok et al. U.S. Patent Document (U.S. Patent No. 5,169,805) was cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application No. 10/742,282 on December 13, 2005. The Capps et al. U.S. Patent Document (U.S. Patent No. 5,432,999) was cited in an Office Action mailed in co-pending commonly assigned U.S. Patent Application No. 10/379,820 on December 19, 2005.

The remaining references cited in this Information Disclosure Statement were brought to applicant's attention in a third-party search conducted on July 22, 2005. A copy of the third-party search results is enclosed herewith.

This Statement is submitted after the mailing date of the first Office Action on the merits, but before the mailing date of any final office action under 37 C.F.R. § 1.113, a notice of allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution in the application. The Director is hereby authorized to charge $180.00 in payment of the fee for submission of this Supplemental Information Disclosure Statement pursuant to 37 C.F.R. § 1.97(c)(2), payment of any additional fees required in connection with this Statement, or credit any overpayment of the same, to Deposit Account No. 06-1075 (order no.: 001202.0106). A duplicate copy of this Supplemental Information Disclosure Statement is enclosed herewith.

An early and favorable action is respectfully requested.

Respectfully submitted,

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	4

Complete if Known	
Application Number	10/700,429 (Conf. No. 5639)
Filing Date	November 3, 2003
First Named Inventor	Glenn J. Leedy
Art Unit	2814
Examiner Name	Shrinivas Rao
Attorney Docket Number	ELM-1 Cont.10

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-Kind Code[2] (*if known*)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US 3,932,932	01-20-1976	Goodman	
		US 4,028,547	06-07-1977	Eisenberger	
		US 4,393,127	07-12-1983	Greschner et al.	
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		US 4,990,462	02-05-1991	Sliwa	
		US 5,051,326	09-24-1991	Celler et al.	
		US 5,110,712	05-05-1992	Kessler et al.	
		US 5,119,164	06-02-1992	Sliwa et al.	
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		US 5,284,804	02-08-1994	Moslehi	
		US 5,432,999	07-18-1995	Capps et al.	
		US 5,470,693	11-28-1995	Sachdev et al.	
		US 5,480,842	01-02-1996	Clifton et al.	
		US 5,577,050	11-19-1996	Bair et al.	
		US 5,733,814	03-31-1998	Flesher et al.	
		US 5,745,673	04-28-1998	Di Zenzo et al.	
		US 5,818,748	10-06-1998	Bertin et al.	
		US Re 37,637	04-09-2002	Clifton et al.	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	

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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document: Country Code[3]-Number[4]-Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
		EP 0 201 380 B1	12-17-1986	Fairchild Semiconductor Corporation		
		EP 0 224 418 B1	06-03-1987	Fujitsu Limited		
		EP 0 419 898 B1	04-03-1991	Siemens Aktiengesellschaft		
		EP 0 455 455 B1	11-06-1991	AT&T Corp.		
		EP 0 487 302 B1	05-27-1992	Shin-ETSU Handotai Company Limited		
		EP 0 503 816 B1	09-16-1992	Shin-ETSU Handotai Company Limited		
		EP 0 518 774 B1	12-16-1992	France Telecom		
		EP 0 526 551 B1	02-10-1993	The Commonwealth of Australia		
		EP 0 554 063 B1	08-04-1993	Canon Kabushiki Kaisha		
		EP 0 555 252 B1	08-18-1993	Fraunhoffer-Gesellschaft Zur Förderung Der Angewandten Forschung E.V..		
		WO 1989 010255	11-02-1989	3D Systems Inc.		
		WO 1990 009093	08-23-1990	Polylithics Inc.		
		WO 1992 017901	10-15-1992	Integrated System Assemblies Corporation		

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NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
		Jones, R.E., Jr. "An evaluation of methods for passivating silicon integrated circuits"; April 1972; pp. 23-8	
		Svechnikov, S.V.; Kobylyatskaya, M.F.; Kimarskii, V.I.; Kaufman, A.P.; Kuzovlev, Yu. I.; Cherepov, Ye. I.; Fomin, B.I.; "A switching plate with aluminum membrane crossings of conductors"; 1972	
		Sun, R.C.; Tisone, T.C.; Cruzan, P.D.; "Internal stresses and resistivity of low-voltage sputtered tungsten films (microelectronic cct. conductor)"; March 1973; pp. 1009-16	
		Wade, T.E.; "Low temperature double-exposed polyimide/oxide dielectric for VLSI multilevel metal interconnection"; 1982; pp. 516-19	
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		Pei-lin Pai; Chetty, A.; Roat, R.; Cox, N.; Chiu Ting; "Material characteristics of spin-on glasses for interlayer dielectric applications"; November 1987, pp. 2829-34	
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		Kochugova, I.V.; Nikolaeva, L.V.; Vakser, N.M., (M.I. Kalinin Leningrad Polytechnic Institute (USSR); "Electrophysical investigation of thin-layered inorganic coatings"; 1989; pp. 826-828	
		Reche, J.J. H.; "Control of thin film materials properties used in high density multichip interconnect"; April 24-28, 1989; p. 494	
		Maw, T.; Hopla, R.E.; "Properties of a photoimageable thin polyimide film"; Nov. 26-29-, 1990; pp. 71-6	
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		Guckel, H.; "Surface micromachined pressure transducers"; 1991; pp. 133-146	
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